

allowing said high pressure working gas to [bubble] be dispersed through said liquid metal fuel.

10. (amended) [In a closed Brayton cycle power system, a] \underline{A} direct contact reactor/storage [tank of the type wherein an oxidant is reacted with a liquid metal fuel] apparatus comprising:

[a working gas;]

a [housing containing said liquid metal fuel] tank;

a liquid metal fuel contained within said tank;

an injector disposed in said housing below the surface of said liquid metal fuel [for injecting said oxidant into said liquid metal fuel];

an oxidant provided to said injector for injection into said
liquid metal fuel;

an inlet bubbling tube having a multiplicity of apertures
therethrough along the length thereof disposed below
the surface of said liquid metal fuel in said
reactor/storage tank [for allowing said high pressure
working gas to bubble through said liquid metal fuel];





- a working gas provided to said inlet bubbling tube at high

 pressure for dispersion through said liquid metal fuel

 via said multiplicity of apertures in said inlet

 bubbling tube; and
- a working gas outlet disposed in said [housing] <u>tank</u> above the surface of said liquid metal fuel for allowing said heated working gas to exit said [housing] <u>tank</u>.
- 11. (amended) A direct contact reactor/storage apparatus as in claim 10 further comprising:
 - a screen interposed between said liquid metal fuel and said working gas outlet for preventing particulate matter from entering said working gas outlet; and
 - a filter interposed between said screen and said working gas outlet for removing liquid metal vapors and particulate matter from said heated working gas.
- 12. [The device of] A direct contact reactor/storage apparatus as in claim 11 wherein the working gas is a gas selected from a group consisting of argon, helium, neon, xenon and mixtures thereof with a molecular weight in the range of 20 to 50 grams/mole.

